ISSN 1809-127X (online edition)
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Journal of species lists and distribution

NOTES ON GEOGRAPHIC DISTRIBUTION

Reptilia, Squamata, Amphisbaenia, *Amphisbaena cuiabana* (Strüssmann and Carvalho, 2001): Range extension in the state of Mato Grosso, Brazil

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ABSTRACT: *Amphisbaena cuiabana* (Strüssmann and Carvalho, 2001) is reported from three localities in Mato Grosso, Brazil. These new records extend its known distribution on 275 km northwest, 230 km west, 67 km east of its type-locality. We redefine the diagnosis of the species based on these additional specimens.

Since its original description, *Amphisbaena cuiabana* (Strüssmann and Carvalho, 2001) is known only from its type-locality, the municipality of Cuiabá, state of Mato Grosso. It was firstly included in the genus *Cercolophia* Vanzolini, 1992 due its marked vertical caudal keel; however, Mott and Vieites (2009) study on phylogenetic systematics using molecular data for neotropical amphisbaenians sank *Cercolophia* into the genus *Amphisbaena*, and they considered the two diagnostic characters for the genus *Cercolophia* (vertical caudal keel and the absence of tail autotomy) flawed. Here we report 17 additional specimens of *A. cuiabana*, twelve of them from three new localities in the state of Mato Grosso, and five from its type-locality in Cuiabá. We also redefine the diagnostic characters for the species.

Strüssmann and Carvalho (2001) considered as diagnostic characters for *A. cuiabana* the presence of four precloacal pores and the highest number of body annuli (286-292) among its congeners. In fact, *A. cuiabana* only has fewer body annuli than *A. supernumeraria* (333-337), a northeast Brazilian species of amphisbaenid recently described (Mott *et al.* 2009). Authors when describing *A. cuiabana* mentioned the presence of a constriction site on 9th or 10th tail annuli, and they speculate the possibility of tail autotomy in this species, although they could not find any specimen with autotomized tail.

From 1999 to 2006, 12 new specimens of *A. cuiabana* from three new localities were incorporated in the *Coleção Zoológica de Vertebrados da Universidade Federal de Cuiabá* (UFMT), all of them from the state of Mato Grosso, and five additional specimens were obtained from its type-locality.

One male specimen (UFMT 4108) was collected on Araputanga (275 km northwest of its type-locality; Figure 1). This specimen has the highest number of body annuli found so far in this species (Table 1) and has an autotomized tail on annulus 8th. Six specimens of *A. cuiabana* (two males, UFMT 7519, UFMT 6016, and four females, UFMT 3545-3546, UFMT 7521, UFMT 5942) were obtained in Campo Novo dos Parecis, extending its distribution on 230 km west of its type-locality. Five specimens of *A. cuiabana* (one male, UFMT 357, and four females, UFMT 355-356, UFMT 358-359) were obtained in Chapada dos Guimarães, 67 km east of its type-locality.

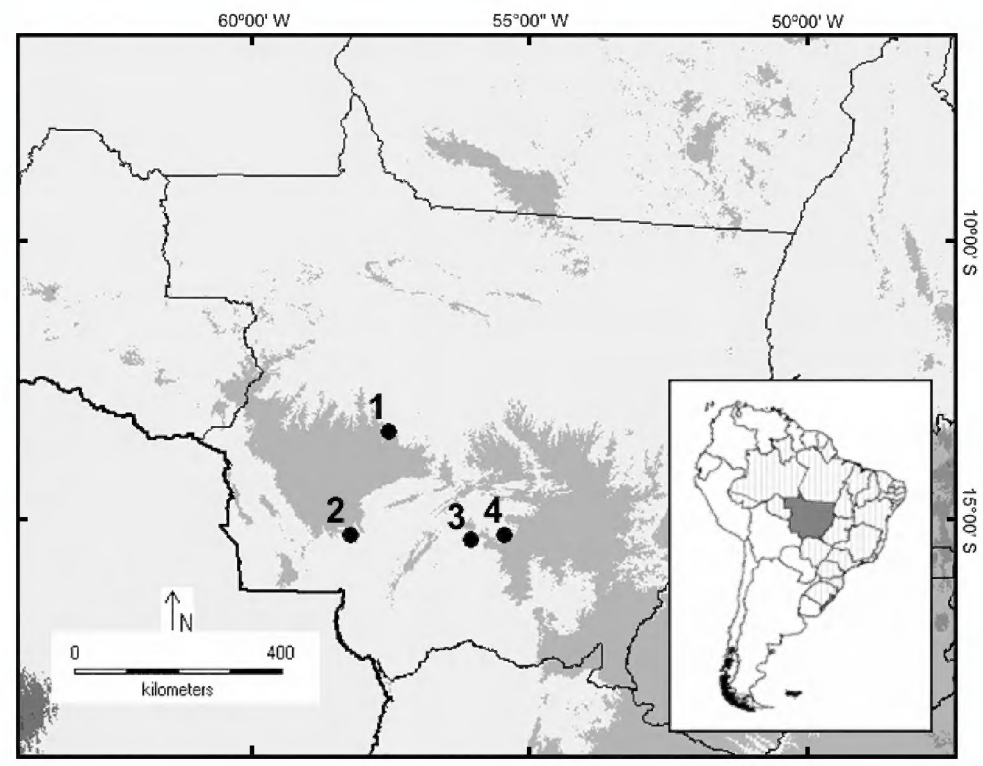

FIGURE 1. Geographic distribution of *Amphisbaena cuiabana*. Elevation: light gray= 127-431 m; gray= 432-990 m; dark gray= above 990 m. Locality numbers: 1 = Campo Novo dos Parecis (13°40' S, 57°53' W); 2 = Araputanga (15°28' S, 58°21' W); 3 = type-locality, Cuiabá (15°35' 46" S, 56°05'48" W); and 4 = Chapada dos Guimarães (15°27' S, 55°44' W). All these localities are in the state of Mato Grosso, Brazil. Inset map represents South America where Mato Grosso state is solid color.

Five female specimens of *A. cuiabana* were collected in its type-locality in Cuiabá (UFMT 835-836, UFMT 217, UFMT 6011, UFMT 6025). One specimen (UFMT 6025) has an autotomized tail on annulus 8th, revealing that the narrowest tail annuli, in fact, represents the autotomic site of the tail of this species.

With these additional specimens, the range of the number of body annuli for *A. cuiabana*, changes from 282-286 to 278-309, and the tail annuli from 17-20 to

18-20 (with an autotomic site on annulus 8th). The largest specimen known for the species is 316 mm snout-vent length, and it seems that male has longer tails than female. Nevertheless, additional specimens must be collected in order to test this statistically. The nasorostral scale is fused with nasals in some specimens (47 %), but not in all (53 %) as previously noticed by Strüssmann and Carvalho (2001).

The difficulty for finding fossorial fauna results in descriptions of new species based on few specimens, hiding the intra and inter-populations meristic variation. New specimens when found must be revealed in scientific journals in order to get a better diagnosis of these elusive animals.

Table 1. *Amphisbaena cuiabana* measurements and scale counts. UFMT = Coleção Zoológica da Universidade Federal do Mato Grosso. Asterisk represents specimens with autotomized tail.

Institution Number	Municipality	Annuli		Lenght (milimeters)		Sex
		Body	Tail	Snout-Vent	Tail	
UFMT 4108	Araputanga	309	18	241	24	Male
UFMT 0359	Chapada dos Guimarães	284	18	280	23	Female
UFMT 0356	Chapada dos Guimarães	316	20	134	11	Female
UFMT 0357	Chapada dos Guimarães	303	19	217	19	Male
UFMT 0358	Chapada dos Guimarães	291	19	218	18	Female
UFMT 0355	Chapada dos Guimarães	296	19	178	17	Female
UFMT 5942	Campo Novo dos Parecis	285	7 *	301	12 *	Female
UFMT 3546	Campo Novo dos Parecis	281	17	141	10	Female
UFMT 3545	Campo Novo dos Parecis	290	17	152	11	Female
UFMT 7519	Campo Novo dos Parecis	283	17	316	27	Male
UFMT 6016	Campo Novo dos Parecis	278	17	243	20	Male
UFMT 7521	Campo Novo dos Parecis	278	17	212	19	Female
UFMT 6011	Cuiabá	280	17	265	19	Female
UFMT 0835	Cuiabá	282	18	25	20	Female
UFMT 0836	Cuiabá	288	18	218	19	Female
UFMT 2617	Cuiabá	281	20	206	20	Female
UFMT 6025	Cuiabá	286	8 *	211	9 *	Female

Acknowledgments: We thank Marcos A. Carvalho for allowing us to access specimens housed at Coleção Zoológica de Vertebrados da Universidade Federal do Mato Grosso.

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Received: March 2010
Revised: November 2010
Accepted: December 2010
Published online: December 2010
Editorial responsibility: Daniel Loebmann